

# MODEL 72200 22 TON CAPACITY AIR/HYDRAULIC AXLE JACK SETUP • OPERATING • MAINTENANCE INSTRUCTIONS

Note: Revision letters (A, B, C, D etc.) after model numbers have been omitted as they do not affect the setup, operating and maintenance instructions of a particular jack unless otherwise noted.

# IMPORTANT: READ THESE INSTRUCTIONS BEFORE OPERATING

BEFORE USING THIS DEVICE, READ THIS MANUAL COMPLETELY AND THOROUGHLY, UNDERSTAND ITS OPERATING PROCEDURES, SAFETY WARNINGS AND MAINTENANCE REQUIREMENTS. FAILURE TO DO SO COULD CAUSE ACCIDENTS RESULTING IN SERIOUS OR FATAL PERSONAL INJURY AND/OR PROPERTY DAMAGE.

The use of portable automotive lifting devices is subject to certain hazards that cannot be prevented by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have owners and personnel involved in the use and operation of equipment who are careful, competent, trained, and qualified in the safe operation of the equipment and its proper use. Examples of hazards are dropping, tipping, or slipping of motor vehicles or their components caused primarily by improperly securing loads, overloading, off-centered loads, use on

other than hard level surfaces, and using equipment for a purpose for which it was not designed.

It is the responsibility of the owner to make sure all personnel read this manual prior to using this device. It is also the responsibility of the device owner to keep this manual intact and in a convenient location for all to see and read. If the manual is lost or not legible, contact Norco Industries, Inc. for a free replacement. If the operator is not fluent in English, the product and safety instructions shall be read to and discussed with the operator in the operator's native language by the purchaser/ owner or his designee, making sure that the operator comprehends its contents.

#### **WARRANTY**

This product is covered by a Limited Lifetime Warranty. For details see the back cover of Norco's product catalog.

# **A** WARNING

- Before lifting a vehicle, refer to the vehicle's service manual or inquire from the vehicle manufacturer the recommended jack lifting points and jack stand support surfaces on the vehicle chassis.
- Inspect the jack before each use. Do not use the jack if it is damaged, altered, modified, in poor condition, leaking hydraulic fluid, or unstable due to loose hardware. Take corrective action before using the jack.
- This jack was designed for lifting purposes only. Do not attempt to work on the vehicle until jack stands rated equal to or greater than the rated capacity of the jack are positioned to support the load.
- · Do not move or dolly the vehicle while on the jack.
- Do not use the jack beyond its rated capacity. Lift only dead weight.
- Never lift a load without using a Norco approved saddle inserted in the extension screw.
- Center load on saddle. Be sure setup is stable. Off-center loads can cause jack failure and/or loss of load.
- · Use the jack on a hard level surface.
- Do not modify the jack or use saddle adapters or saddle extenders unless approved or supplied by Norco.
- · Always lower the jack slowly and carefully.

# **SETUP**

- **1.** Refer to the exploded view parts drawing for identification, location and position of parts.
- **2.** Remove the bolt and washer from under the handle fork. Insert the handle tube in the handle fork while simultaneously inserting the stopper rod in the handle fork guide holes.
- 3. Raise the lock lever on the handle assembly up so the stopper rod does not have to come in contact with the handle fork bracket. Rotate the release knob at the top of the handle back and forth until you feel the bottom of the handle engage the slotted release valve fitting inside and at the bottom of the handle fork.
- **4.** Align the handle fork hole that accepts the bolt and washer with the receiving hole in the bottom of the handle. Once the holes are lined up secure the handle to the handle fork with the bolt and washer provided.
- **5.** Move the handle assembly up and down while simultaneously pushing down on the lock lever until the stopper rod engages one of the locating holes in the handle fork bracket. There are three holes in the handle fork bracket that are used to lock the handle in either a horizontal, angular or almost vertical position.

- **6.** Install the quick disconnect of your choice in the back of the air valve. The air valve and hose are equipped with a loop that secures them to the "L" shaped hook on the upper portion of the handle.
- **7.** Secure the air valve and hose to the handle and connect a shop air line to the air valve.
- **8.** Sometimes air gets trapped in the hydraulic system during shipment. An air bound hydraulic system feels spongy when pumped.

#### **PURGING AIR FROM THE HYDRAULIC SYSTEM**

- **a.** Open the release valve by turning the knob at the top of the handle in a counterclockwise direction two full turns.
- b. Depress the air valve for about 15 to 20 seconds.
- c. Close the release valve by turning the knob in a clockwise direction until tight.
- d. Depress the air valve until the ram raises to maximum height.
- e. If the condition remains, repeat steps "a" through "d" until all the air is purged from the system.

# **OPERATING INSTRUCTIONS**

- 1. Become familiar with the identification and function of the operating jack components.
  - a. The ram is the shaft that comes out of the jack when you depress the air valve and lifts the load.
  - b. The ram is equipped with an extension screw which can be unscrewed to extend from the ram if there is not enough hydraulic stroke to raise the load to the desired height. Always use one of the three saddles listed below:
    - **2" Diameter Saddle** (p/n: 222328)
    - 2 1/4" Extension Saddle (p/n: 45100852)
    - 4" Extension Saddle (p/n: 45100851)

These can be inserted into the hole on top of the extension screw. Choose the adapter/saddle that suits your lifting situation.

- **2.** Chock the vehicle's tires that will not be lifted off the ground prior to lifting the vehicle and if available, apply the emergency brake or any other method of braking.
- **3.** Position the jack at the designated lift point. Estimate the required ram travel to raise the vehicle to the desired height. If the desired vehicle height exceeds the entire ram travel, unscrew the extension screw to make up the difference and add an extension adapter if necessary.
- **4.** Turn the knob at the top of the handle all the way in a clockwise direction until tight. Lock the handle in a position that will not interfere with the vehicle when raised or lowered. Keep the handle in that locked position until the work is completed and you are ready to remove the jack from use.
- **5.** With the jack in the lowered position, push the jack under the vehicle. IMPORTANT: Use the vehicle manufacturer's recommended lifting procedures and lifting points before lifting loads.
- **6.** In most cases 100 P.S.I. input air pressure (do not exceed 145 P.S.I.) will lift the maximum capacity load not to exceed 22 tons. Depress the air valve until the top of the ram comes close to the designated lift point. Make sure the designated lift point is flat,

- parallel to the ground and free from grease, any kind of lubricant, or debris. Proceed with pumping the jack in order to lift the vehicle to the desired height. During lifting, inspect the position of the jack in relation to the ground and the ram in relationship to the load to prevent any unstable conditions from developing. If conditions look like they are becoming unstable, slowly lower the load and make appropriate setup corrections after the load is fully lowered.
- 7. When the vehicle or load is lifted to its desired height, immediately place safety support stands (jack stands) in their designated locations and adjust the stands' support columns up as close to the designated vehicle support points as possible. Although jack stands are individually rated, they are to be used in a matched pair to support one end of a vehicle only. Stands are not to be used to simultaneously support both ends or one side of a vehicle. Slowly and carefully turn the release knob in a counterclockwise direction to gently lower the vehicle onto the safety support stands (jack stands). Make sure the vehicle is safely supported by the safety support stands' (jack stands') saddles and not the locating lugs of the saddles. Inspect the relationship of the safety support stands (jack stands) with the ground and the safety support stand (jack stand) columns and saddles with the vehicle to prevent any unstable conditions. If conditions look unstable, close the jack's release knob and depress the air valve to raise the vehicle off the safety support stands (jack stands). Make the appropriate setup changes and slowly and carefully lower the vehicle onto the safety support stand saddles.
- **8.** After the work is done, close the release knob and depress the air valve until the jack is high enough to remove the vehicle or load from the safety support stand saddles. Be sure load is stable. If it is not, lower load back onto safety support stands. Make appropriate setup corrections and repeat the step again. Remove the safety support stands from under the vehicle being very careful not to move the vehicle.
- **9.** Turn the release knob in a counterclockwise direction very slowly and carefully to lower the vehicle or load down to the ground.

# PREVENTATIVE MAINTENANCE

- 1. Always store the jack in a well protected area where it will not be exposed to inclement weather, corrosive vapors, abrasive dust, or any other harmful elements. The jack must be cleaned of water, snow, sand, or grit before using.
- 2. The jack must be lubricated periodically in order to prevent premature wearing of parts. A general purpose grease must be applied to the threads on the extension screw. Do not lubricate any portion of the lift saddle and make sure the saddle is free from grease, any kind of lubricant, or debris before using the jack.
- 3. It should not be necessary to refill or top off the reservoir with hydraulic fluid unless there is an external leak. An external leak requires immediate repair which must be preformed in a dirt-
- free environment by qualified hydraulic repair personnel who are familiar with this equipment. Norco Authorized Service Centers are recommended. IMPORTANT: In order to prevent seal damage and jack failure, never use alcohol, hydraulic brake fluid, or transmission oil in the jack. Use Chevron Hydraulic Oil AW ISO 32 or its equivalent Unocal Unax AW 150.
- **4.** Every jack owner is responsible for keeping the jack label clean and readable. Use a mild soap solution to wash external surfaces of the jack but not any moving hydraulic components.
- **5.** Do not attempt to make any hydraulic repairs unless you are a qualified hydraulic repair person that is familiar with this equipment.

### REPAIR SERVICE

If your Norco product requires service or repair, contact the Norco Customer Service Department for the location of the nearest Norco Authorized Service Center.

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It will be necessary to provide the Norco Authorized Service Center with a copy of the bill of sale if requesting warranty repair. If the authorized service center determines your product is eligible for warranty repair, the repair will be made at no charge and returned freight prepaid. The cost of non-warrantable service, repair, and return freight is the customer's responsibility.